AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior versions of claims in this application.

(Currently Amended) A medical solution comprising:

a first single solution comprising bicarbonate and carbonate in such proportions that a partial pressure of carbon dioxide in the first single solution is of the same order of magnitude as a partial pressure of carbon dioxide in the atmosphere, and has a pH of 10.1 - 10.5; and

a second single solution comprising an acid.

wherein said first and second single solutions are mixed after terminal sterilization to form a final solution, wherein said second single solution has a pH of 1.0 - 1.5 and said final solution has a pH of 7.0 - 7.6.

- (Currently Amended) A medical solution according to claim 1, where said first single solution has a pH of 10.3 40.4—40.5.
- (Previously Presented) A medical solution according to claim 1 or 2, wherein said second single solution has a pH of 1.3.
- (Previously Presented) A medical solution according to claim 3, wherein the second single solution comprises HCl.
- (Previously Presented) A medical solution according to claim 1,
 wherein the medical solution further comprises one or more osmotic agents.
- (Currently Amended) A medical solution according to claim 5,
 wherein said one or more osmotic agents are chosen from the group including:

glucose, glucose polymers, glycerol, xylitol, fructose, amino acids, peptides, proteins, amino sugars, N-acetyl glucose amine (NAG), [[or]] and combinations thereof.

- 7. (Previously Presented) A medical solution according to claim 5, wherein said one or more osmotic agents are arranged in said second single solution before said second single solution is mixed with said first single solution to form the final solution.
- (Currently Amended) A medical solution according to claim 5, further comprising a third single solution, and wherein said one or more osmotic <u>agents</u> are arranged in said third single solution, prior to the formation of the final solution.
- (Previously Presented) A medical solution according to claim 8, further comprising a fourth single solution, and wherein said one or more osmotic agents are arranged in said fourth single solution.
- 10. (Previously Presented) A medical solution according to claim 9, wherein said one or more osmotic agents in said third and/or fourth single solution is comprise glucose and/or glucose polymers giving rise to glucose degradation products during terminal sterilization and/or storage, and wherein said third and/or fourth single solutions comprise an acid and have a pH of at least 1.8 and at most 2.6.
- (Previously Presented) A medical solution according to claim 1 or 5,
 wherein the medical solution further comprises one or more electrolytes.
- 12. (Previously Presented) A medical solution according to claim 11, wherein said one or more electrolytes comprise one or more of the ions of sodium, calcium, potassium, magnesium, and/or chloride.

- 13. (Previously Presented) A medical solution according to claim 11, wherein said one or more electrolytes are arranged in said first single solution, prior to the formation of the final solution.
- 14. (Previously Presented) A medical solution according to claim 11, wherein said one or more electrolytes are arranged in said second single solution, prior to the formation of the final solution.
- 15. (Previously Presented) A medical solution according to claim 9, further comprising one or more electrolytes, and wherein said one or more electrolytes are arranged in said third single solution and/or said fourth single solution, prior to the formation of the final solution.
- 16. (Previously Presented) A medical solution according to claim 1, wherein the first and second single solutions are provided in first and second compartments in a multi-compartment bag before being mixed to form the final solution.
- 17. (Previously Presented) A method for producing a medical solution according to claim 1, said method comprising:

providing said first and second single solutions in separate compartments; and thereafter

terminally sterilizing said first and second single solutions.

- 18. (Previously Presented) A method according to claim 17, wherein said step of terminally sterilizing comprises heat sterilization and/or radiation sterilization.
- 19. (Currently Amended) A method according to claim 17[[.]], wherein said step of terminally sterilizing comprises heat sterilization at a temperature of at least 100°C.

- 20. (Previously Presented) A method according to claim 17, wherein said first and second single solutions, after terminal sterilization, are mixed to form a final solution.
- 21. (Currently Amended) A method according to claim [[27]] 31, wherein said first, second, and third single solutions, after terminal sterilization, are mixed to form a final solution.
- 22. (Currently Amended) A method according to claim [[28]] <u>32</u>, wherein said first, second, and fourth single solutions, after terminal sterilization, are mixed to form a final solution.
- 23. (Currently Amended) A method according to claim [[28]] <u>32</u>, wherein said first, second, third, and fourth single solutions, after terminal sterilization, are mixed to form a final solution.
- 24. (Previously Presented) A method according to claim 17, wherein the first and second single solutions are provided in first and second compartments in a multi-compartment bag before being mixed to form the final solution.
- 25. (Previously Presented) A multi-compartment bag comprising the medical solution according to one of claims 1, 8, or 9.

Claims 26-28 (Canceled).

- 29. (Previously Presented) A method according to claim 21, wherein the first, second, and third single solutions are provided in first, second, and third compartments in a multi-compartment bag before being mixed to form the final solution.
- 30. (Previously Presented) A method according to claim 23, wherein the first, second, third, and fourth single solutions are provided in first, second, third, and

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fourth compartments in a multi-compartment bag before being mixed to form the final solution.

- 31. (New) A method for producing a medical solution according to claim 8, wherein the first, second, and third single solutions are provided in first, second, and third compartments in a multi-compartment bag before being mixed to form the final solution.
- 32. (New) A method for producing a medical solution according to claim 9, wherein the first, second, third, and fourth single solutions are provided in first, second, third, and fourth compartments in a multi-compartment bag before being mixed to form the final solution.
- 33. (New) A method for producing a medical solution according to claim 32, wherein the first, second, and third single solutions, after terminal sterilization, are mixed to form a final solution.